

## WHAT IS CLAIMED IS:

1. In a Multi-processor network for indicating the occurrence of hardware and software operating conditions, a health monitoring and corrective actuation system  
5 comprising:
- (a) a Windows .NET Operating System (700) working in conjunction with a Server means (702);
  - 10 (b) a HealthMonitor Service means (704) communicating with said .NET operating system (700) and providing input to a HealthEvents Service module (720);
  - 15 (c) user client application/script means (712) for communicating with said Service Module (720) in order to provide information to said .NET Operating System (700) to enable the reporting and correction of undesirable HealthEvents and Predictive Trends which might lead to operational failures.

2.           The system of claim 1 wherein said HealthMonitor Service means (704) includes:

5                   (b1) said HealthMonitor service means (704) providing policy parameters and items with possible future problems;

10                   (b2) data link library means (706) for indicating single violation reports, the collection of violation reports and methods available for permitting information to said client (712) regarding violations of policy parameters;

                  (b3) Collection means (710) for holding violations of policy parameters and items subject to predictive failure;

15                   (b4) storage means (700) for storing data from said collection means (710);

20                   (b5) output result means to notify said Use-Client application/script means (712) of action to be taken by said .NET operating system (704).

3. In a Multi-processor network involving multiple numbers of "local systems", a Health Monitoring and corrective response service for handling each said "local system" involved, comprising:

5 (a) means for selectively monitoring each one of said local systems in said network automatically at startup;

(b) means to create a collection of health events and predictive events;

10 (c) means to enable a series of defined operating policies P;

(d) means to check each local system, for any violation of said series of operating policies P;

15 (e) means to collect a list of policy violations detected;

(f) means to apply corrective actions in those areas where policy violations have been detected.

4. The source of claim 3 wher in said means (b) to create a collection includes:

5 (b1) means to sense current operational and availability problems in each local system;

(b2) means to sense future trends which can predict future problems which may occur.

5. The source of claim 3 wherein said means (c) to enable operating policies includes:

(c1) means to check when each policy P is enabled in a local system;

5 (c2) means to read a file of P attributes to determine;

(i) what to monitor;

(ii) how often to monitor;

10 (iii) what action to take when a policy violation is sensed.

6. The service of claim 3 wherein said means (c) to enable operating policies includes:

(6c1) means for utilizing a separate processing Thread T for monitoring each provider.

7. The service of claim 6 wherein said means (6c1) includes:

(6c1a) means to check a data item specified in said policy P;

(6c1b) means to sense a violation of Policy P;

(6c1c) means to create a Violation Event and add it to said collection of Health Events.

8. The service of claim 7 which further includes:

5 (6c1d) means to check the monitoring of Policy P to sense if predictive data is encountered;

(6c1e) means to add each sensing of a predictive event to said Predictive Events collection.

9. The service of claim 7 where said means (6c1b) includes:

5 (6c1b1) means to utilize a User-Client application/script means to provide corrective action on said violation of Policy P.

10. The service of claim 8 wherein means (6c1e) includes:

5 (6c1e1) means to send a warning signal to said client-user regarding possible future failure of said predictive event in said Predictive Events collection.

11.           The service of claim 3 wherein said network is operated on a .NET platform.

12. In a network of multi-processors having a series of local systems operated by Client-Users, a method for monitoring the health of and for providing remedial actions to said monitored local systems comprising the steps of:

- (a) monitoring the state of hardware and software in each of said local systems over a selected time period;
- (b) collecting Health Events data for each local system;
- (c) enabling applications/scripts for handling system health conditions deemed outside of pre-set parameters reported in a Health Events Object.



13. The method of claim 12 wherein step (b) further includes the steps of:

- 5 (b1) establishing Health Events parameters which set standards of acceptability and non-acceptability for each local system;
- (b2) sensing each local system for operations which violate said parameters of acceptability.

14. The method of claim 13 wherein step (b1) includes the steps of:

- 5 (b1a) establishing trend setting predictive means to sense when an event is trending toward a direction of failure;
- (b1b) notifying said Client-User of impending failure events.

15.           The method of claim 12 which includes the steps of:

5                   (d) utilizing a .NET platform working with a Server and subject to a Health Monitor Service program;

                  (e) enabling a Server Director program to access Health Events and Predictive Events objects in a Collection file;

10                  (f) applying an application/script program to institute corrective action for selected events in said Collection file.

16.           The method of claim 15 wherein step (e) includes the steps of:

5                   (e1) establishing a pre-set Policy P for each local system;

                  (e2) collecting violations of each said Policy P;

                  (e3) enabling scripts to handle each noted violation of said Policy P.